The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended)

A compound of formula I

$$R^{1}$$
 R^{2}
 R^{3}

in which

R¹ denotes H, A, Hal, (CH₂)_nHet, (CH₂)_nAr, or cycloalkyl having 3 to 7 C atoms,

CF₃, NO₂, CN, C(NH)NOH or OCF₃,

R² denotes (CH₂)_nHet, (CH₂)_nAr, or cycloalkyl having 3 to 7 C atoms or CF₃,

 R^3 , R^4 denote H, $(CH_2)_nCO_2R^5$, $(CH_2)_nCOHet$, CHO, $(CH_2)_nOR^5$, $(CH_2)_nHet$,

 $(CH_2)_nN(R^5)_2$, CH=N-OA, CH₂CH=N-OA, $(CH_2)_nNHOA$, $(CH_2)_nN(R^5)Het$,

 $(CH_2)_nCH=N-Het$, $(CH_2)_nOCOR^5$, $(CH_2)_nOOOR^5$; $(CH_2)_nN(R^5)CH_2CH_2OR^5$,

 $(CH_2)_nN(R^5)CH_2CH_2OCF_3$, $(CH_2)_nN(R^5)C(R^5)HCOOR^5$,

 $(CH_2)_nN(R^5)C(R^5)HOOR^5, (CH_2)_nN(R^5)CH_2COHet, (CH_2)_nN(R^5)CH_2Het,$

 $(CH_2)_nN(R^5)CH_2CH_2Het, \\ \underline{(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2COOR^5},$

 $(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2OOOR^5; (CH_2)_nN(R^5)CH_2CH_2N(R^5)_2,$

CH=CHCOOR⁵, CH=CHCH₂NR⁵Het, CH=CHCH₂N(R⁵)₂, CH=CHCH₂OR⁵ or

(CH₂)_nN(R⁵)Ar, where with the proviso that in each case one of the radicals R³

or R4 denotes H,

R⁵ denotes H or A,

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms,

alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or

linear or branched organic radical containing one or more heteroatoms which

is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or

polysubstituted by A and/or Hal, OR5, OOCR5, COOR5, CON(R5)2, CN,

NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

n de:

denotes 0, 1, 2, 3, 4 or 5,

Hal

denotes F, Cl, Br or I, and

X

denotes N, or

in the case where R1 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or R^2 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, alternatively denotes CH,

or an a salt, solvate, enantiomer, racemate, or a mixture of enantiomers thereof,

or a pharmaceutically acceptable salt or solvate thereof.

- 2. (Previously Presented) A compound of formula I according to Claim 1, in which R¹ denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, -dichloro- or -dicyanophenyl, 3,4,5trifluorophenyl, 3,4,5-trimethoxy- or -triethoxyphenyl, thiophen-2-yl or thiophen-3-yl.
- 3. (Previously Presented) A compound of formula I according to claim 1, in which R³ denotes H.
- 4. (Previously Presented) A compound of formula I according to claim 1, in which R⁴ denotes H.
- 5. (Previously Presented) A compound of formula I according to claim 1, in which R² denotes phenyl, 2-, 3- or 4-cyanophenyl, 2-, 3or 4-fluorophenyl, 2-, 3- or 4-methyl-, -ethyl-, -n-propyl- or -n-butylphenyl, 2,3-, 2,4-, 2,5- or 2,6-difluoro- or -dicyanophenyl, thiophen-2yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, or 2- or 3-pyrazinyl.
- 6. (Previously Presented) A compound of formula I according to claim 1, in which X denotes N.
- 7. (Currently Amended) A compound of formula IA, IB, IC, ID, IE or IF

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{2}
 R^{4}
 R^{4

in which

R¹ denotes H, A, Hal, (CH₂)_nHet, (CH₂)_nAr, or cycloalkyl having 3 to 7 C atoms, CF₃, NO₂, CN, C(NH)NOH or OCF₃;

 R^2 denotes $(CH_2)_nHet$, $(CH_2)_nAr$, or cycloalkyl having 3 to 7 C atoms or CF_3 , A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or

polysubstituted by A and/or Hal, OR^5 , $OOCR^5$, $COOR^5$, $CON(R^5)_2$, CN, NO_2 , NH_2 , $NHCOR^5$, CF_3 or SO_2CH_3 ,

R⁵ denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R1 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or R^2 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, alternatively denotes CH,

or a salt or solvate thereof.

8. (Previously Presented) A process for preparing a compound of formula IA according to claim 7

$$R \leftarrow \bigvee_{R^2} \bigvee_{OA} \bigvee_{A} \bigvee_{$$

comprising reacting a compound of formula II

or an acid-addition salt thereof, in which R¹ and X have the meanings indicated for the compound of formula IA, with a compound of formula III

in which

A and R² have the meanings indicated for the compound of formula IA, and/or

a basic compound of formula IA is converted into one of its salts by treatment with an acid.

9. (Previously Presented) A process for preparing a compound of

formula IB according to claim 7

in which R¹, R², R³, R⁴, X and A have the meanings indicated for the compound of formula IB,

comprising reacting a compound of formula II

or an acid-addition salt thereof, in which

R¹ and X have the meanings indicated for the compound of formula IB,

with a compound of formula IV

$$\mathbb{R}^2$$
 \mathbb{I}^{V}

in which

A and R² have the meanings indicated for the compound of formula IB, and/or

a basic compound of formula IB is converted into one of its salts by treatment with an acid.

- 10. (Previously Presented) A pharmaceutical composition comprising a compound of formula I according to claim 1 and a pharmaceutically acceptable carrier.
- 11. (Currently Amended) A method for the treatment or prophylaxis of a disease which can be influenced by the binding of a compound of formula I to 5 HT receptors, comprising administering to a subject in need thereof an effective amount of a

pharmaceutical composition according to claim 10.

- 12. (Previously Presented) A method for antagonizing a 5-HT receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.
- 13. (Previously Presented) A method for antagonizing a 5-HT2A receptor, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.
 - 14. (Cancelled)
- 15. (Previously Presented) A process for preparing a pharmaceutical composition according to claim 10, comprising mixing together a compound of formula I and a pharmaceutically acceptable carrier.
- 16. (Currently Amended) A method for the prophylaxis and/or treatment of psychoses, a neurological disorder, amyotrophic lateral sclerosis, eating disorder, bulimia, anorexia nervosa, premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder, comprising administering to a subject in need thereof an effective amount of a pharmaceutical composition according to claim 10.
- 17. (Currently Amended) A compound of claim 1, in which Het is <u>one of</u> the following groups

18. (Currently Amended) the following groups

A compound of claim 7, in which Het is one of

19. (Previously Presented)

A compound of formula I according to claim 1

$$R^{1}$$
 R^{2}
 R^{3}

in which

R¹ denotes H, A, Hal, (CH₂)_nHet, (CH₂)_nAr, or cycloalkyl having 3 to 7 C atoms, CF₃, NO₂, CN, C(NH)NOH or OCF₃,

 R^2 denotes $(CH_2)_nHet$, $(CH_2)_nAr$, or cycloalkyl having 3 to 7 C atoms or CF_3 ,

 $R^{3}, R^{4} \qquad \text{denote H, } (CH_{2})_{n}CO_{2}R^{5}, (CH_{2})_{n}COHet, CHO, (CH_{2})_{n}OR^{5}, (CH_{2})_{n}Het, \\ (CH_{2})_{n}N(R^{5})_{2}, CH=N-OA, CH_{2}CH=N-OA, (CH_{2})_{n}NHOA, (CH_{2})_{n}N(R^{5})Het, \\ (CH_{2})_{n}CH=N-Het, (CH_{2})_{n}OCOR^{5}, (CH_{2})_{n}OOOR^{5}, (CH_{2})_{n}N(R^{5})CH_{2}CH_{2}OR^{5}, \\ (CH_{2})_{n}N(R^{5})CH_{2}CH_{2}OCF_{3}, (CH_{2})_{n}N(R^{5})C(R^{5})HCOOR^{5}, \\ (CH_{2})_{n}N(R^{5})CH_{2}$

 $(CH_2)_nN(R^5)C(R^5)HOOOR^5$; $(CH_2)_nN(R^5)CH_2COHet$, $(CH_2)_nN(R^5)CH_2Het$,

(CH₂)_nN(R⁵)CH₂CH₂Het, (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)CH₂COOR⁵, (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)CH₂OOOR⁵, (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)₂,

CH=CHCOOR⁵, CH=CHCH₂NR⁵Het, CH=CHCH₂N(R⁵)₂, CH=CHCH₂OR⁵ or (CH₂)_nN(R⁵)Ar, where with the proviso that in each case one of the radicals R³

or R⁴ denotes H,

R⁵ denotes H or A,

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR⁵, OOCR⁵, COOR⁵, CON(R⁵)₂, CN, NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

n denotes 0, 1, 2, 3, 4 or 5,

Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R1 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or $\ensuremath{\mbox{R}^2}$

in which R denotes H or an alkyl group having 1 to 6 C atoms, alternatively denotes CH,

or a pharmaceutically acceptable salt thereof.

20. (Currently Amended) A compound of claim 19, in which Het is one of the following groups

21. (Currently Amended) A compound of formula IA, IB, IC, ID, IE or IF

$$R^{1}$$
 R^{2}
 R^{2}
 R^{2}
 R^{2}
 R^{3}
 R^{4}
 R^{2}
 R^{4}
 R^{2}
 R^{4}
 R^{2}
 R^{4}
 R^{4

in which

Het

R¹ denotes H, A, Hal, $(CH_2)_nHet$, $(CH_2)_nAr$, or cycloalkyl having 3 to 7 C atoms, CF_3 , NO_2 , CN, C(NH)NOH or OCF_3 ,

 R^2 denotes $(CH_2)_nHet$, $(CH_2)_nAr$, or cycloalkyl having 3 to 7 C atoms or CF_3 , A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or

polysubstituted by A and/or Hal, OR^5 , $OOCR^5$, $COOR^5$, $CON(R^5)_2$, CN, NO_2 , NH_2 , $NHCOR^5$, CF_3 or SO_2CH_3 ,

R⁵ denotes H or A,

n denotes 0, 1, 2, 3, 4 or 5,

Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R1 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or $\ensuremath{R^2}$

in which R denotes H or an alkyl group having 1 to 6 C atoms, alternatively denotes CH,

or a pharmaceutically acceptable salt thereof.

 R^5

denotes H or A,

22. (Currently Amended) A compound of claim 21, in which Het is <u>one of</u> the following groups

23. (New) A compound of claim 1, in which R^{I} denotes Het or Ar, R^2 denotes Het or Ar, R^3 , R^4 denote H, (CH₂)_nCO₂R⁵, CH=N-OA, CH₂CH=N-OA, (CH₂)_nNHOA, $(CH_2)_nN(R^5)Het$, $(CH_2)_nCH=N-Het$, $(CH_2)_nOCOR^5$, $(CH_2)_nN(R^5)CH_2CH_2OR^5$, $(CH_2)_nN(R^5)CH_2CH_2OCF_3$, $(CH_2)_nN(R^5)C(R^5)HCOOR^5$, (CH₂)_nN(R⁵)CH₂COHet, (CH₂)_nN(R⁵)CH₂Het, (CH₂)_nN(R⁵)CH₂CH₂Het. $(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2COOR^5$, $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$, CH=CHCOOR⁵, CH=CHCH₂NR⁵Het, CH=CHCH₂N(R⁵)₂, CH=CHCH₂OR⁵ or (CH₂)_nN(R⁵)Ar, with the proviso that in each case one of the radicals R³ or R⁴ denotes H,

A denotes straight-chain or branched alkyl or alkoxy having 1 to 10 C atoms, alkenyl or alkoxyalkyl having 2 to 10 C atoms,

Het denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic or linear or branched organic radical containing one or more heteroatoms which is unsubstituted or mono- or polysubstituted by A and/or Hal,

Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR⁵, OOCR⁵, COOR⁵, CON(R⁵)₂, CN, NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

n denotes 0, 1, 2 or 3,

Hal denotes F, Cl, Br or I, and

X denotes N, or

in the case where R1 denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, and/or R² denotes

in which R denotes H or an alkyl group having 1 to 6 C atoms, alternatively denotes CH.

24. (New) A compound of claim 21, in which Het is one of the following groups

25. (New) A compound of claim 1, in which the solvate of a compound of formula I is a mono- or dihydrate or alcoholate of the compound of formula I.

- 26. (New) A compound of claim 17, in which the solvate of a compound of formula I is a mono- or dihydrate or alcoholate of the compound of formula I.
- 27. (New) A method for administering a pharmaceutical composition according to claim 10, comprising providing an effective amount of said pharmaceutical composition to a subject in need thereof.